

Remarks

Claims 1-30 remain pending. Claims 1, 3, and 21 have been amended to set forth the invention with the specificity required by statute, and claims 7, 12 and 27 have been amended to correct obvious typographical errors. The amendments of claims 1, 3, and 21 are supported in the specification at page 15, lines 8-9, wherein the amount of microwave absorbable particles is at least 10% by weight of the composition. In view of the amendments and comments below, reconsideration of the present application is respectfully requested.

Applicants' Response to Rejection of Claims Under 35 U.S.C. §102

Claims 1-10 and 20 have been rejected under 35 U.S.C. §102(b) as allegedly anticipated by U.S. Patent No. 5,272,216 to Clark, Jr. et al. ("Clark"). Applicants submit that the amendment of independent claim 1 obviates these rejections.

The present invention provides compositions and methods of preparing microwave curable compositions which provide a faster cure and more uniform heating; particularly where the compositions are used to make thicker articles. Therefore, the compositions of the present invention are well-suited for the formation of articles such as gaskets, which may be used in the automotive industry. The compositions include a heat curable resin component, a curing agent and greater than 10% by weight of microwave absorbable particles.

Although Clark is directed to a method of degradation of plastics, Clark also provides curable compositions and methods for repairing or creating joints in composite structures such as airplanes by binding two opposing surfaces. The curable compositions of Clark may also be in the form of tapes or strips for adhering upper and lower sheets of material. What these two compositions have in common is the thinness of the application, which is unlike the present invention. The curable compositions in Clark include curable polymer and a curing agent, however, Clark limits the amount of microwave absorbable particles (ferrites in Clark) to between 0.1 and 10% by weight of the compositions, which is outside the range of the present claims as amended.

Clark fails as an anticipatory reference for failing to disclose the use of microwave absorbable particles in amounts greater than 10% by weight of the composition. Therefore, reconsideration and withdrawal of the rejections under Section 102 are appropriate and respectfully requested.

Applicants' Response to Rejection of Claims Under 35 U.S.C. §103

Claims 1-11 and 20-30 have been rejected as allegedly unpatentable over Clark. The Examiner states that it would have been obvious to follow the teachings of Clark to arrive at the present invention. Applicants submit that the amendments of independent claims 1 and 21 obviate these grounds of rejection.

The ferrite amount in Clark for his curable compositions is limited to around 0.66% by weight of the composition as shown in the examples of FIG. 2 and FIG. 3. See column 7, line 12. The only compositions which are shown in the examples to include a broader potential range of ferrite are those directed toward the degradation compositions. See column 8, lines 52-53. This range is 0.5 to 10% which is still below the range of the curable compositions of the present invention.

One of skill in the art would not be led to the compositions of the present invention by following the teachings of Clark. Not only are the teachings of Clark applicable to a non-analogous field, namely the repairing of joints or bonding of layers or methods of plastic degradation as compared to the formation of articles as in the present invention, but also, Clark clearly provides a teaching away from the use of microwave absorbable particles in an amount greater than 10% by weight of the compositions. In fact, Clark teaches away from using more than 0.66% by weight of the composition, which is significantly less than the amounts greater than 10% as claimed in the present invention. Clark teaches that in order to achieve the desired lap shear strength of the composition, no more than 0.66% by weight of ferrite (a microwave absorbable particle) may be used. See FIG. 3D. A composition which includes 1.65% ferrite resulted in a reduced lap shear strength as compared to a composition including no ferrite. One of skill in the art would clearly recognize that Clark teaches an optimal amount of ferrite up to

0.66% and that additional ferrite results in an inferior result. Furthermore, the compositions with the highest amounts of ferrite particles in Clark are directed toward plastic degradation which the present invention seeks to avoid.

None of the remaining references cures the deficiency of the primary reference, Clark, by providing a teaching or suggestion to incorporate microwave absorbable particles in an amount greater than 10%. Furthermore, even if any of the references did provide a teaching or suggestion to prepare a composition including greater than 10% of microwave absorbable particles, that reference would not be properly combinable with Clark which teaches away from such a composition.

In view of the above amendments and remarks, Applicants respectfully submit that the present application, including claims 1-30 is now in condition for allowance. Favorable action thereon is respectfully requested.

Should the Examiner have any questions with respect to the above amendments and remarks, the Examiner is respectfully requested to contact Applicants' undersigned counsel at the telephone number below.

Respectfully submitted,



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